

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
4 August 2005 (04.08.2005)

PCT

(10) International Publication Number
WO 2005/069892 A2

(51) International Patent Classification: Not classified

(21) International Application Number:
PCT/US2005/001402

(22) International Filing Date: 18 January 2005 (18.01.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/537,115 16 January 2004 (16.01.2004) US

(71) Applicant (for all designated States except US): BAT-
TELLE MEMORIAL INSTITUTE [US/US]; 505 King
Avenue, Columbus, OH 43201-2693 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): MONZYK, Bruce,
F. [US/US]; 7460 Blaney Road, Delaware, OH 43015
(US). ROSE, James, K. [US/US]; 10647 Deepcut Road,
Millersport, OH 43046 (US). BURCKLE, Eric, C.
[US/US]; 2712 Quarry Lake Drive, Columbus, OH 43204
(US). CLARK, Timothy, O. [US/US]; 1125 West Main

Street, Lancaster, OH 43130 (US). SMELTZ, Andrew,
D. [US/US]; 206 Director's Court, Westerville, OH 43081
(US). RIDER, Dennis, G. [US/US]; 9238 Hazelton Etna
Road, Southwest, Pataskala, OH 43062 (US).

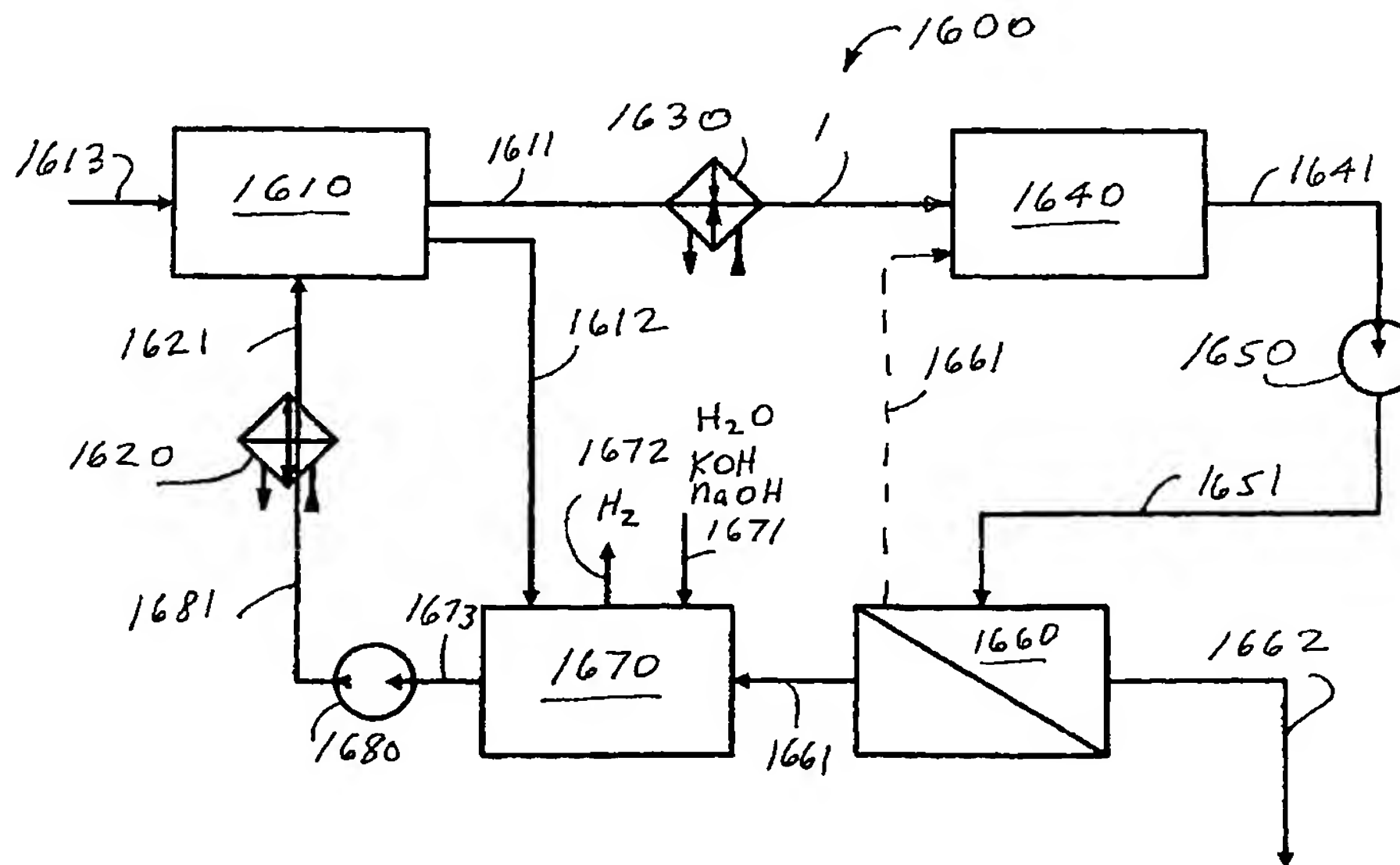
(74) Agents: HAGAN, Timothy, W. et al.; Dinmore & Shohl,
LLP, Suite 1300, One South Main Street, One Dayton Cen-
tre, Dayton, OH 45402-2023 (US).

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,

[Continued on next page]

(54) Title: METHODS AND APPARATUS FOR PRODUCING FERRATE (VI)



(57) Abstract: An undivided electrochemical cell. The electrochemical cell includes a housing defining an undivided chamber, the housing having one electrolyte inlet and at least two electrolyte outlets; an anode in the chamber; a cathode in the chamber; and an electrolyte in the chamber, wherein the anode and the cathode are not gas diffusion electrodes. The invention also involves a method of operating an electrochemical cell, and methods for making ferrate(VI).

WO 2005/069892 A2



FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

Published:

- *without international search report and to be republished upon receipt of that report*